

No. 15-1363 (and consolidated cases)

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**IN THE UNITED STATES COURT OF APPEALS  
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

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**STATE OF WEST VIRGINIA, *et al.*,**

*Petitioners,*

v.

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*,**

*Respondents.*

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On Petition for Review of Final Agency Action of the United  
States Environmental Protection Agency  
80 Fed. Reg. 64,662 (Oct. 23, 2015)

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**BRIEF OF INTERVENORS ADVANCED ENERGY  
ECONOMY, AMERICAN WIND ENERGY ASSOCIATION,  
AND SOLAR ENERGY INDUSTRIES ASSOCIATION IN  
SUPPORT OF RESPONDENTS**

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## CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

Pursuant to Circuit Rule 28(a)(1), Intervenors Advanced Energy Economy, American Wind Energy Association, and Solar Energy Industries Association state as follows:

### **Parties and *Amici*:**

All parties, intervenors, and *amici* appearing in this case are listed in the Brief for Respondents EPA.

### **Rulings Under Review:**

The final agency action under review is “Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units,” 80 Fed. Reg. 64,662 (October 23, 2015).

### **Related Cases:**

Intervenors Advanced Energy Economy, American Wind Energy Association, and Solar Energy Industries Association adopt the statement of related cases set forth in the Brief for Respondents EPA.

## CORPORATE DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure 26.1 and Circuit Rule 26.1, Intervenor Advanced Energy Economy, American Wind Energy Association, and Solar Energy Industries Association state as follows:

Advanced Energy Economy (“AEE”) states that it is a not-for-profit trade association dedicated to making the energy we use secure, clean, and affordable. AEE does not have any parent companies or issue stock, and no publicly held company has a 10% or greater ownership interest in AEE.

American Wind Energy Association (“AWEA”) is a non-profit trade association representing a broad range of entities with a common interest in encouraging the expansion and facilitation of wind energy resources in the United States. AWEA does not have a parent corporation or issue stock, and no publicly held company owns 10% or greater interest in it.

Solar Energy Industries Association (“SEIA”) states that it is a trade association that represents approximately 1,100 member companies, including installers, project developers, manufacturers, contractors, financiers and non-profits. SEIA has no parent corporation and no publicly held company owns 10% or more of its stock.

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## GLOSSARY

CO <sub>2</sub>	Carbon dioxide
EGU	Electricity generating unit
EIA	U.S. Energy Information Administration
EPA	U.S. Environmental Protection Agency
ERC	Emission rate credit
IPM	Integrated Planning Model
JA	Joint Appendix
MWh	Megawatt-hour
NERC	North American Electric Reliability Corporation
NGCC	Natural gas combined cycle
NO <sub>x</sub>	Nitrogen oxides
NREL	National Renewable Energy Laboratory
Proposed Rule	U.S. Environmental Protection Agency, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 79 Fed. Reg. 34,830 (June 18, 2014)
Rule	U.S. Environmental Protection Agency, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, Final Rule, 80 Fed. Reg. 64,662 (Oct. 23, 2015)
TSD	Technical Support Document



## STATUTES AND REGULATIONS

Pertinent statutes and regulations are set forth in Respondent Environmental Protection Agency's (EPA's) addendum.

## SUMMARY OF ARGUMENT

Section 111 of the Clean Air Act “speaks directly’ to emissions of carbon dioxide” (CO<sub>2</sub>) from power plants. *American Elec. Power Co. v. Connecticut* (“*AEP*”), 131 S. Ct. 2527, 2530 (2011). Consistent with §111(d), the Clean Power Plan (the “Rule”) sets emission guidelines for states to follow in setting standards that limit CO<sub>2</sub> from existing plants. 80 Fed. Reg. 64,662 (Oct. 23, 2015), JA\_\_-\_\_.

The record demonstrates that EPA's determination of the “best” system of emission reduction, and the Building Blocks in particular, was eminently reasonable.<sup>1</sup> For Building Block 2, EPA considered data from the Federal Energy Regulatory Commission and other sources to determine the increased electricity that can be generated by lower-emitting natural gas plants. And for Building Block 3, the agency relied on extensive data to project growth in renewable

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<sup>1</sup> Respondent-Intervenors Advanced Energy Economy, American Wind Energy Association, and Solar Energy Industries Association represent more than 3,000 companies and organizations in the advanced energy sector, a \$200 billion industry in the United States. Their members range from companies that produce and supply electricity from natural gas, solar, and wind projects, to companies that improve the performance of the electricity distribution grid and increase the efficiency of energy use, to large electricity consumers with an interest in a robust and reliable electricity system. Respondent-Intervenors have special expertise with respect to the Building Blocks 2 and 3 technologies.

generating capacity and to determine the increased electricity that can be generated by zero-emitting renewable energy. The agency, moreover, reasonably and explicitly concluded that increasing generation from lower- and zero-emitting sources would *not* negatively impact electricity reliability.

Petitioners' cherry-picked statements from the record and extra-record evidence miss the mark entirely. While Petitioners may *disagree* with the agency's determinations, they do not show (as they must) that the agency failed to engage in reasoned decision-making. To the contrary, EPA's targets are consistent with proven, well-established practices in the industry and in line with current industry trends. This Court should therefore sustain the Rule and decline Petitioners' invitation to "substitute its judgment for that of the agency." *Motor Vehicle Mfrs. Ass'n v. State Farm*, 463 U.S. 29, 43 (1983).

## ARGUMENT

### I. EPA'S DETERMINATION OF THE "BEST SYSTEM OF EMISSION REDUCTION" IS ENTITLED TO DEFERENCE

Petitioners preface their "record-based" challenges to the Rule with an extraordinary assertion: that this Court "should not afford *any* deference to EPA's explanations, as the agency admittedly lacks expertise in the power supply industry." Br. 20 (emphasis added).<sup>2</sup> But as the very case cited by Petitioners

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<sup>2</sup> Citations to "Br." are to the Opening Brief of Petitioners on Procedural and Record-Based Issues.

makes clear, “[t]he standard for substantive judicial review of EPA action under the Clean Air Act is taken directly from the APA: The court may reverse only if EPA’s action was ‘arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.’” *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 519-20 (D.C. Cir. 1983) (quoting 42 U.S.C. §7607(d)(9)(A)).

This Court affords an “extreme degree of deference” in its “review of EPA’s administration of the complicated provisions of the Clean Air Act,” *Catawba County v. EPA*, 571 F.3d 20, 41 (D.C. Cir. 2009)—including EPA’s determinations under §111. As the Supreme Court recognized in *AEP*, Congress has “designated an expert agency, here, EPA,” 131 S. Ct. at 2539, as the decisionmaker regarding “whether and how to regulate carbon-dioxide emissions from power plants,” *id.* at 2538.

Petitioners assert that EPA lacks expertise in the “power supply industry.” Br. 20. But EPA has unparalleled expertise in establishing standards of performance for the electric power supply industry under the Clean Air Act. And the Act expressly authorizes EPA to promulgate regulations controlling pollutants from stationary sources, specifically including “electric utility steam generating unit[s].” 42 U.S.C. §7412(a)(8); see *id.* §§7479(1); 7651-7651o. Given those express delegations of authority—and EPA’s long history of regulating pollutants from power plants (*e.g.*, 77 Fed. Reg. 9,304 (Feb. 16, 2012); 70 Fed. Reg. 25,162

(May 12, 2005); 63 Fed. Reg. 57,356, 57,400 (Oct. 27, 1998); 40 C.F.R. Pt. 72; 40 C.F.R. Pt. 60, Subpt. D; 40 C.F.R. Pt. 60, Subpt. Da)—Petitioners’ claim that EPA lacks expertise with respect to power plants is without merit.

In reviewing EPA’s emission guidelines, therefore, this Court must merely ensure that the expert agency “considered the relevant factors and articulated a rational connection between the facts found and the choice made.” *Allied Local & Reg’l Mfrs. Caucus v. EPA*, 215 F.3d 61, 68 (D.C. Cir. 2000) (internal quotation marks omitted). The Rule readily satisfies that standard.

## **II. THE RULE IS REASONABLE AND WELL-SUPPORTED BY THE RECORD**

Section 111(d) authorizes EPA to promulgate regulations setting forth guidelines that states use to craft plans establishing “standards of performance” for existing sources of air pollutants. 42 U.S.C. §7411(d). A “standard of performance,” in turn, means an emission standard that reflects the degree of emission reductions “achievable” through the application of the “best system of emission reduction,” *id.* §7411(a)(1), as determined by EPA. The “best system of emission reduction”—which EPA uses to set the emission targets in its guidelines—must be “adequately demonstrated” for a particular source category and account for the “cost of achieving” the emission reductions. *Id.*

Here, EPA determined that the “best system of emission reduction” for two categories of stationary sources comprises a combination of three measures, or

“Building Blocks”: (1) improving heat rate at coal-fired steam plants; (2) shifting generation to lower-emitting natural gas plants; and (3) shifting generation to zero-emitting renewable generating capacity. Significantly, the Rule does not require states to adopt any *specific* method to meet emission goals. Rather, states can adopt measures that use all or none of the Building Block technologies, along with other measures permitted under the Rule. See 80 Fed. Reg. 64,790.

Petitioners spill considerable ink challenging Building Blocks 2 and 3, claiming that EPA is limited to considering measures within the property line of individual sources. But in establishing the “best system of emission reduction,” EPA began (as it should have) by “considering the characteristics of CO<sub>2</sub> pollution and the utility power sector.” *Id.* 64,724. And EPA rightly explained that “the utility power sector is unique in that electricity system resources operate in a complex, interconnected grid system that is physically interconnected and operated on an integrated basis across large regions.” *Id.* 64,692.

EPA also reviewed broad power sector trends, and found that—consistent with the integrated nature of the electricity system—many fossil fuel generators are *already* replacing higher-emitting generation with generation from lower- or zero-emitting sources. *Id.* 64,725. EPA’s determination that the “best system of emission reduction” required an approach that included shifting dispatch to lower-emitting generation sources accounts for current trends and therefore properly

reflects what has been adequately demonstrated in the existing electricity system. Petitioners, by contrast, would require EPA to unreasonably *ignore* the practices that states and power companies alike have successfully used for years to substitute lower-emitting generation for higher-emitting generation and, in turn, reduce emissions in a cost-effective manner.

Petitioners also take issue with EPA's factual findings regarding the Building Blocks. But, as explained below, the agency's thorough process for developing the Building Blocks far exceeds "minimal standards of rationality." *Troy Corp. v. Browner*, 120 F.3d 277, 283 (D.C. Cir. 1997). Petitioners do not show that EPA "entirely failed to consider an important aspect of the problem," *State Farm*, 463 U.S. at 43; "offered an explanation for its decision that runs counter to the evidence before the agency," *id.*; or failed to "respond to significant comments that cast doubt on the reasonableness" of the Rule, *Baltimore Gas & Elec. Co. v. United States*, 817 F.2d 108, 116 (D.C. Cir. 1987). Rather, Petitioners' arguments—when not ignoring the record altogether—at best amount to a "difference in view." *State Farm*, 463 U.S. at 43. But a difference in view is insufficient to invalidate a rule—much less a rule in which the agency spent in excess of 7,500 pages responding to more than 35,000 unique comments and provided well-reasoned explanations for its factual determinations. See Response to Comments, EPA-HQ-OAR-2013-0602-36876.

### A. Building Block 2 is Reasonable

Building Block 2 evaluates the potential for increasing generation by lower-emitting natural gas plants. In establishing Building Block 2, EPA determined—after reviewing data from the Federal Energy Regulatory Commission and other sources—that generation-shifting is consistent with the way power plants are dispatched, and that the industry has increasingly been shifting generation from high-emitting generation (generally coal) to lower-emitting natural gas units in recent years. 80 Fed. Reg. 64,795-64,797. To determine the amount of increased lower-emitting natural gas generation achievable, EPA examined the design capabilities and demonstrated availability of existing gas units, as well as the historical availability of such units in practice. Based on that review, EPA determined that a reasonable—and readily achievable—amount of increased natural gas generation would result from increasing the annual utilization rates of existing lower-emitting gas units to 75% on average. *Id.* 64,797-64,800.

Petitioners protest that EPA improperly assumed increased generation from “new units.” Br. 28-29. Not so. The Rule expressly states that “producing this quantity of generation from this set of [natural gas combined cycle, or NGCC] units”—*i.e.*, from *existing* units—“is feasible.” 80 Fed. Reg. 64,800.

Petitioners also contend that EPA failed to consider whether these natural gas units are actually capable of operating at higher capacity over extended

periods. Br. 29-30. That contention, too, ignores the record. EPA looked to the “historical availability of NGCC units *in practice*.” 80 Fed. Reg. 64,799 (emphasis added). And that data showed that existing gas plants “have proven the ability to sustain 75 percent utilization rates for extended periods of time.” *Id.*

Finally, Petitioners challenge EPA’s citation to a statistical analysis based on 2012 generation data. Br. 28. According to Petitioners, 2012 data is uninformative because 2012 saw historically low gas prices. But EPA relied in part on 2012 data because that data was the most recently available, best reflected the power sector, and was in fact “more reliable” than data from other years. 80 Fed. Reg. 64,814-64,815. And EPA concluded that lower gas prices did not undermine the reliability of the 2012 data because EPA’s analysis of the “best system of emission reduction” is based on emission-reduction *potential*, which is not affected by natural gas prices. *Id.* Far from failing “to consider an important aspect of the problem” (*State Farm*, 463 U.S. at 43), then, EPA thoroughly considered Petitioners’ concerns and offered explanations entirely consistent with the evidence before it. Petitioners may not like EPA’s determinations, but Petitioners’ preference that EPA reach a different result does not render EPA’s decision unreasonable. *Jackson v. Mabus*, 808 F.3d 933, 936 (D.C. Cir. 2015).



## **B. Building Block 3 is Reasonable**

In Building Block 3, EPA determined the potential to increase generation from expanded renewable generating capacity, including solar, wind, geothermal, and hydroelectric. Based on an extensive analysis and review of comments, EPA determined the amount of increased renewable generation that was achievable, cost-effective, and adequately demonstrated. See 80 Fed. Reg. 64,803-64,811; Greenhouse Gas (GHG) Mitigation Measures TSD, 4-20-4-23, JA\_\_-\_\_;<sup>3</sup> Response to Comments, §3.3, EPA-HQ-OAR-2013-0602-36876, JA\_\_.

As part of that process, EPA determined the annual renewable energy growth for 2010-2014, using a capacity factor unique to each renewable technology. 80 Fed. Reg. 64,807-64,808. Next, the agency used the Integrated Planning Model (IPM) to project the amount of renewable generation expected to be in place by 2021 absent the Rule, and added to that amount the achievable growth based on installations from 2010-2014. *Id.* The agency then used the IPM to confirm the feasibility and cost-effectiveness of achieving the projected market penetration of renewable generation. *Id.* 64,808. In determining renewable generating capacity, the agency looked to renewable energy growth data and projections from numerous sources, including the Department of Energy, National

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<sup>3</sup> Available at <https://www.epa.gov/sites/production/files/2015-11/documents/tsd-cpp-ghg-mitigation-measures.pdf>.

Renewable Energy Laboratory (NREL), Lawrence Berkeley National Laboratory, Lazard, and the U.S. Energy Information Administration (EIA). *Id.* 64,807. That thorough process belies Petitioners' protests that the agency's determinations regarding renewable generating capacity are based on "unsupported, unrealistic assumptions about future growth." Br. 33. In fact, EPA's projections of renewable generating capacity growth are *conservative* and firmly supported by the record.<sup>4</sup>

Petitioners contend that EPA's projections are nevertheless flawed because they are higher than "those projected by the [EIA]." Br. 33-34. But EPA *did* consider EIA's projections—along with data from numerous other government and private sources. The agency merely concluded that EIA's data provided an unrealistically low prediction of renewable energy generation growth. 80 Fed. Reg. 64,807; GHG Mitigation Measures TSD 4-20, JA\_\_\_. Thus, in formulating Building Block 3 projections in the final Rule, the agency placed increased reliance on NREL data because of its quality and consistency with other sources—and NREL's demonstrated success in anticipating renewable energy cost and performance trends. 80 Fed. Reg. 64,807; GHG Mitigation Measures TSD 4-13, JA\_\_\_. Petitioners have not even attempted to show that the EPA's rigorous

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<sup>4</sup> See, e.g., SEIA Comments at 58-73, EPA-HQ-OAR-2013-0602-23091, JA\_\_-\_\_; AWEA Comments at 21-30, EPA-HQ-OAR-2013-0602-23566, JA\_\_-\_\_; Natural Resources Defense Council Comments at 6-2-6-23, EPA-HQ-OAR-2013-0602-23580, JA\_\_-\_\_.

approach was unreasonable—much less provide any reason why this Court should determine in the first instance *which* data set is the best predictor of renewable energy growth. See *EarthLink v. FCC*, 462 F.3d 1, 12 (D.C. Cir. 2006).

EPA’s analysis, moreover, identified amounts of incremental renewable generating capacity “that are reasonable, rather than the maximum amounts that could be achieved while preserving the cost-effectiveness of the building block.” 80 Fed. Reg. 64,809. As EPA recognized, the record would support projected renewable energy deployment “well in excess” of the levels established in Building Block 3. *Id.*; see GHG Mitigation Measures TSD 4-20, JA\_\_\_. And compliance under the Rule may be achieved with far lower overall levels of renewable generation than EPA’s projected deployment. GHG Mitigation Measures TSD 4-23, JA\_\_\_ (compliance in a rate-based state program can be achieved with total renewable capacity additions of about 95 GW in 2030, far less than the 233 GW projected as possible under Building Block 3).<sup>5</sup>

Petitioners also argue that EPA improperly used 2012 renewable energy growth data as the “base growth level” for its projections. Br. 34. But EPA quantified both historical average capacity change and maximum capacity change annually for 2010 through 2014, for each renewable energy technology. The

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<sup>5</sup> Sources can also comply through demand-side energy efficiency measures, carbon capture, and other measures that do not require additional renewable deployment. 80 Fed. Reg. 64,755-64,758.

agency then used the resulting five-year *average* annual change to project levels of renewable generation achievable in 2022-2023. GHG Mitigation Measures TSD 4-4-4-5, JA\_\_-\_\_. EPA's projection therefore reasonably accounted for the growth variations among renewable sources, as well as variations in demand for new construction over a five-year period.

Petitioners' contention that 2012 should have been excluded from growth projections altogether because of the 2012 expiration of a wind energy tax credit (Br. 34) misapprehends EPA's method. By averaging five years of data, EPA smoothed out any "bulge" for 2012 (and the resulting dip in 2013-2014 orders). And, again, EPA averaged five different renewable energy technologies, not just wind. Petitioners' only response is to cite a contrary analysis prepared by one of the Petitioners *after* publication of the final Rule. Br. 34 (citing U.S. Chamber of Commerce analysis). Such self-interested second-guessing of EPA's judgments does not provide a basis for invalidating the Rule.<sup>6</sup>

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<sup>6</sup> EPA's targets are well in line with current industry trends. From 2009 through 2014, the cost of utility-scale wind and solar power declined by 58% and 78%, respectively. 80 Fed. Reg. 64,804. And renewable energy made up 62% of all capacity added to the grid during the first half of 2015. FERC, Office of Energy Projects, Energy Infrastructure Update (Sept. 2015), <http://www.ferc.gov/legal/staff-reports/2015/sep-infrastructure.pdf>.

### C. EPA Considered Reliability and Infrastructure Requirements

EPA, in consultation with the Department of Energy and Federal Energy Regulatory Commission, considered reliability and infrastructure concerns at every turn—and reasonably concluded that the Rule will “not interfere with the industry’s ability to maintain the reliability of the nation’s electricity supply.” 80 Fed. Reg. 64,874.

For Building Block 2, EPA examined the technical capacity of the natural gas supply and delivery system to provide increased quantities of natural gas, and concluded that the “natural gas pipeline system can reliably deliver sufficient natural gas supplies” to accommodate a 75% capacity factor. *Id.* 64,800. Petitioners dismiss that conclusion on the ground that it assumes that “little additional [gas] infrastructure will be needed.” Br. 38. But EPA expressly determined that “substantial additional pipeline expansions are currently under construction.” 80 Fed. Reg. 64,800.

In any event, EPA also extensively documented *why* it concluded that existing gas infrastructure would be capable of supporting the increased utilization potential in Building Block 2. Specifically, the agency observed that the existing pipeline system is already reliably supporting utilization rates of 60-65% for extended periods, and that planners have repeatedly demonstrated an ability to expand capacity in response to increased demand. *Id.* And EPA’s Integrated

Planning Model—which the agency has successfully used for more than two decades—showed that the gas pipeline system can reliably deliver sufficient natural gas to allow utilization to increase up to an average annual capacity factor of 75 percent. *Id.* 64,800-64,801.

Petitioners do not attempt to show how the IPM analysis was unreasonable. Instead, they cite a North American Electric Reliability Corporation (NERC) report, which states that the Rule will require electric and gas infrastructure “reinforcements.” Br. 39. But EPA did not *ignore* that report; to the contrary, it explained that NERC’s analysis assumed less flexibility than allowed by the Rule; that the report did not fully reflect the current electricity grid; and that other analyses determined that there were ready solutions to the issues raised by NERC. 80 Fed. Reg. 64,800-64,801. Once again, Petitioners at most suggest a “difference in view,” *State Farm*, 463 U.S. at 43, but they do not show that the agency failed to consider an important aspect of the problem—or that the agency’s thorough reliability analysis was otherwise unreasonable.

Nor did EPA ignore warnings from a “chorus” of others. Br. 39. To the contrary, the agency relied on numerous reports from regional transmission organizations, electricity reliability organizations, and other outside experts that concluded that the Rule “provides states and affected EGUs with a wide range of

options and operational discretion that can prevent reliability issues.” 80 Fed. Reg. 64,881.

EPA also addressed the reliability and infrastructure needs potentially implied by Building Block 3, and again concluded—after extensive analysis—that increased renewable energy deployment would *not* negatively affect reliability. Specifically, the agency found that state and regional grid operators are *already* reliably integrating large amounts of renewable energy; that the potential range of new transmission infrastructure is well within historical patterns; that existing infrastructure can be repurposed to accommodate incremental infrastructure needs; that various technical improvements can further minimize reliability concerns; and that renewables can themselves *improve* grid reliability. *Id.* 64,809-64,810. In other words, the record amply supports EPA’s determination that increased deployment of renewables is perfectly compatible with a reliable electricity system.

Most fundamentally, Petitioners ignore the fact that states (and plants) are allowed to choose different ways of complying with the Rule and may use that flexibility to enhance reliability. For example, states can utilize energy efficiency and other measures that have been shown to enhance reliability, and the Rule’s long compliance period affords states the ability to determine the timing and sequence of actions necessary for compliance while ensuring reliability. *Id.*

64,875.<sup>7</sup> EPA's conclusion that integration of renewable energy will not affect reliability is amply supported in the record, and Petitioners do not show otherwise.

**D. EPA Reasonably Concluded that Emissions Trading Would Ease the Cost of Compliance**

In assessing the achievability of the Building Blocks, EPA concluded that states could—and likely would—incorporate emissions-trading programs, along with a wide range of other measures, to meet performance target rates. Petitioners contend that EPA did not merely consider emission-trading programs in analyzing the feasibility of achieving emission limits, but instead “concede[d]” that “sources need to engage in trading to satisfy the emission guidelines.” Br. 49, 50. But EPA conceded no such thing and, in fact, expressly stated that its consideration of emissions trading in its analysis of the achievability of the Building Blocks “does not mean ... that states are *required* to establish trading programs.” 80 Fed. Reg. 64,734 (emphasis added).

For states that do not want to engage in or run trading programs, the Rule provides that “all owners of affected EGUs have a direct path for replacing higher-emitting generation with [renewable energy] regardless of their organizational

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<sup>7</sup> The Rule also builds in a “reliability safety valve” that permits states to modify their plans if reliability issues arise, thus ensuring that states can adequately manage significant, unforeseen reliability challenges. 80 Fed. Reg. 64,877.



type.”<sup>8</sup> *Id.* 64,805. Thus, plants can comply with the Rule by directly investing in renewable generation or entering into bilateral contracts to procure such generation. *Id.* 64,804-64,805. Such options do not require emissions trading, and the record shows that many affected plants are already engaging in such practices. *Id.*

Petitioners also erroneously claim that EPA did not “conduct any meaningful analysis to determine whether ... sufficiently robust trading systems will arise” in the first place. Br. 50. In fact, EPA conducted an extensive analysis of the availability of trading mechanisms in other contexts, and determined, based on that history and a number of other factors, that many states could—and are expected to—incorporate some form of emissions-trading program to lower overall compliance costs and add flexibility. 80 Fed. Reg. 64,726, 64,735, 64,733; see *id.* 64,732 n.376 (citing study by the Advanced Energy Economy Institute); *id.* 64,733 n.380 (discussing industry and state comments). Petitioners have made no showing that EPA’s analysis was unreasonable.

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<sup>8</sup> In states that establish a rate-based performance standard, the state plan must provide for the issuance of “emission rate credits” to verify and account for the emission reductions resulting from investment in lower-emitting generation. 80 Fed. Reg. 64,731.

## CONCLUSION

The petitions should be denied.

Respectfully submitted,

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## CERTIFICATE OF COMPLIANCE

Pursuant to Rule 32 of the Federal Rules of Appellate Procedure and the Circuit Rules of this Court, I hereby certify that the foregoing Brief of Intervenors Advanced Energy Economy, American Wind Energy Association, and Solar Energy Industries Association in Support of Respondents contains 3,692 words as counted by the word-processing system used to prepare this brief. I further certify that the combined words of this brief and those filed by State Intervenors, NGO Intervenors, and Power Company Intervenors do not exceed the 20,000 word limit set by the Court in its January 28, 2016 Order (Document #1595922).

/s/ John Bernetich  
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**CERTIFICATE OF SERVICE**

I hereby certify that on this 29th day of March, 2016, I electronically filed the foregoing with the Clerk of the Court using the CM/ECF System, which will send notice of such filing to all registered CM/ECF users. I also caused the foregoing to be served via U.S. mail on counsel for the following parties at the following addresses:

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